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### NOTICE OF ALLOWANCE AND FEE(S) DUE

26646

7590

03/22/2010

KENYON & KENYON LLP ONE BROADWAY NEW YORK, NY 10004 EXAMINER

SAVANI, AVINASH A

ART UNIT PAPER NUMBER

3749 DATE MAILED: 03/22/2010

	APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
Ī	10/550,253	12/01/2005	Christos Papageorgiou	13489/1	1943	

TITLE OF INVENTION: FLOATING SOLAR CHIMNEY

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	06/22/2010

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

#### HOW TO REPLY TO THIS NOTICE:

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If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

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II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

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### Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE

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CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)  26646 7590 03/22/2010					Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.				
Z6646 KENYON & F ONE BROADW NEW YORK, N	/2010	,	Certificate of Mailing or T I hereby certify that this Fee(s) Transmittal is States Postal Service with sufficient postage for addressed to the Mail Stop ISSUE FEE addransmitted to the USPTO (571) 273-2885, on				ransmission being deposited with the United or first class mail in an envelope tress above, or being facsimile		
									(Depositor's name)
									(Signature)
									(Date)
APPLICATION NO.	FILING DATE		FIRST NAMED INVENT	ГOR		ATTO:	RNEY DOCKET NO.	COI	NFIRMATION NO.
10/550,253 TITLE OF INVENTION	12/01/2005 ī: FLOATING SOLAR (	CHIMNEY	Christos Papageorgio	ou			13489/1		1943
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nonprovisional	NO	\$1510	\$300		\$0		\$1810		06/22/2010
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SAVANI, A	SAVANI, AVINASH A 3749		126-571000		J				
"Fee Address" ind PTO/SB/47; Rev 03-(Number is required.  3. ASSIGNEE NAME A PLEASE NOTE: Un	ND RESIDENCE DATA less an assignee is ident h in 37 CFR 3.11. Comp	" Indication form	data will appear on th	nativ ingle or a attor I be I r typ r typ ne pa	ely, e firm (having as a gent) and the nammeys or agents. If printed.  e) ttent. If an assignussignment.	memb es of up no nam	er a 2 o to e is 3	ocume	ent has been filed for
Please check the appropr	riate assignee category or	categories (will not be p	rinted on the patent):		Individual 🗖 Co	orporati	on or other private gro	oup en	tity 🗖 Government
4a. The following fee(s)  Issue Fee Publication Fee (N	permitted)	4b. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above)  ☐ A check is enclosed. ☐ Payment by credit card. Form PTO-2038 is attached. ☐ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number (enclose an extra copy of this form).							
**	s SMALL ENTITY state	us. See 37 CFR 1.27.		-	-		TITY status. See 37 Cl		
NOTE: The Issue Fee an interest as shown by the	d Publication Fee (if req records of the United Sta	uired) will not be accepte tes Patent and Trademark	ed from anyone other th k Office.	an th	ne applicant; a regi	stered a	ttorney or agent; or th	ie assi	gnee or other party in
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KENYON & KE	ENYON LLP	SAVANI, AVINASH A				
ONE BROADWA		ART UNIT	PAPER NUMBER			
NEW YORK, NY	10004		3749			
		DATE MAILED: 03/22/2010				

# Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 812 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 812 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

	Application No.	Applicant(s)			
	10/550,253	PAPAGEORGIOU, CHRISTOS			
Notice of Allowability	Examiner	Art Unit	11110100		
	AVINASH SAVANI	3749			
	AVIINASII SAVAINI	3749			
The MAILING DATE of this communication apperature All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT R of the Office or upon petition by the applicant. See 37 CFR 1.313	(OR REMAINS) CLOSED in or other appropriate commu <b>IGHTS.</b> This application is s	n this application. If not included unication will be mailed in due c	d ourse. <b>THIS</b>		
1. This communication is responsive to <u>2/5/2010</u> .					
2. The allowed claim(s) is/are <u>3-9</u> .					
<ul> <li>3.  Acknowledgment is made of a claim for foreign priority unal  All b)  Some* c)  None of the:</li> <li>1.  Certified copies of the priority documents have</li> </ul>	.,.,	or (f).			
2.   Certified copies of the priority documents have	• •	<del></del>			
<ol><li>Copies of the certified copies of the priority do</li></ol>	cuments have been received	d in this national stage applicati	on from the		
International Bureau (PCT Rule 17.2(a)).					
* Certified copies not received:					
Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDONN THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.		e a reply complying with the requ	uirements		
4. A SUBSTITUTE OATH OR DECLARATION must be subminFORMAL PATENT APPLICATION (PTO-152) which give			OTICE OF		
5. CORRECTED DRAWINGS ( as "replacement sheets") must	st be submitted.				
(a) I including changes required by the Notice of Draftspers	son's Patent Drawing Review	v ( PTO-948) attached			
1) 🗌 hereto or 2) 🔲 to Paper No./Mail Date					
<ul><li>(b) ☐ including changes required by the attached Examiner'</li><li>Paper No./Mail Date</li></ul>	s Amendment / Comment or	in the Office action of			
Identifying indicia such as the application number (see 37 CFR 1 each sheet. Replacement sheet(s) should be labeled as such in t			oack) of		
6. DEPOSIT OF and/or INFORMATION about the depo attached Examiner's comment regarding REQUIREMENT			ote the		
Attachment(s) 1. ☑ Notice of References Cited (PTO-892)	5. ☐ Notice of In	formal Patent Application			
2.   Notice of Draftperson's Patent Drawing Review (PTO-948)		ummary (PTO-413),			
3. Information Disclosure Statements (PTO/SB/08),	Paper No./ 7. ⊠ Examiner's	/Mail Date Amendment/Comment			
Paper No./Mail Date  4.  Examiner's Comment Regarding Requirement for Deposit	Statement of Reasons for Allow	vance			
of Biological Material 9. ☐ Other					
/Avinash Savani/					
Examiner, Art Unit 3749					

Application/Control Number: 10/550,253 Page 2

Art Unit: 3749

### **EXAMINER'S AMENDMENT**

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Jong Lee on 3/3/2010.

The application has been amended as follows:

### IN THE CLAIMS:

In independent claim 3: line 19, insert --provided by the lighter-than-air gas-- after "force".

#### **Reasons for Allowance**

2. The following is an examiner's statement of reasons for allowance: The invention, "Floating Solar Chimney", is in the field of solar collectors in the form of chimneys for the utilization of solar energy to heat incoming air. Disclosed is an adjustable, free-standing, floating solar chimney that is comprised of a main chimney unit, a base unit, a dynamically variable folding unit, and a chimney seat. The main chimney unit consists of a balloon type ring filled with lighter-than-air gas that is capable of floating supported by a supporting ring made of rigid, light-weight material. There are also rings incorporating valves for the allowance of incoming air into the chimney unit. The base unit supports the main chimney unit and comprises an upper ring and a lower ring with a smaller diameter than the lower ring. The dynamically variable folding unit is

Application/Control Number: 10/550,253

Art Unit: 3749

coupled to the base unit and has an accordion-like configuration that consists of similar balloons as in the main chimney unit. The folding unit also comprises valves for the incoming of air. The chimney seat is configured to accommodate the base unit and dynamically variable folding unit. The unit as a whole is capable of withstanding high winds, while maintaining shape to ensure maximum solar absorption/conversion. The prior art of reference, U.S. Patent 5527216 to Senanayake also discloses a solar chimney, utilizing balloon rings filled with lighter than air gas, and support rings. Senanayake however does not disclose the unique base unit, in combination with the dynamically variable folding unit or chimney seat. De Luca (WO2004/036039) teaches a similar base unit that allows bending of the chimney in high winds. This reference, however does not show the benefits of base unit, dynamically variable folding unit and chimney seat by providing a secure support for a chimney unit to maximize solar absorption: the upper and lower ring ensure proper support, while the accordion-like configuration allows extreme bending in all directions depending on the incoming wind, and the chimney seat ensures that the entire unit will remain secured on the ground. The prior art of reference do not show this arrangement nor are the benefits shown. For these reasons, the invention is unique and allowable.

Page 3

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Application/Control Number: 10/550,253 Page 4

Art Unit: 3749

Any inquiry concerning this communication or earlier communications from the examiner should be directed to AVINASH SAVANI whose telephone number is (571)270-3762. The examiner can normally be reached on Monday- Friday, alternate Fridays off, 7:30-5 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven McAllister can be reached on 571-272-6785. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Avinash Savani/ Examiner, Art Unit 3749 /Steven B. McAllister/ Supervisory Patent Examiner, Art Unit 3749

/A. S./ 3/4/2010